

REMARKS

The last Office Action in the above-identified application and the references cited by the Examiner have been carefully considered. The claims in their present form are respectfully urged to patentably distinguish over the references cited by the Examiner. Therefore, original Claims 1-14 have not been amended. New Claims 15 and 16 are submitted herewith for the Examiner's kind consideration.

Claims 1-14 have been rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent application having Publication No. 2002/0126993 (Sakuramoto et al.). In reviewing the Office Action, in particular, pages 1-5, and the Examiner's helpful description of the passages in the Sakuramoto et al. patent application which he believes teaches the claimed invention, Applicant observes that the pertinent passages and figures from the Sakuramoto et al. published application which are relied on by the Examiner in rejecting each of the claims are summarized as follows: Claim 1 – paragraph 0011; Claim 2 – paragraph 0011; Claim 3 – paragraphs 0104-0113; Claim 4 – paragraph 0092; Claim 5 – paragraphs 0011 and 0096; Claim 6 – paragraph 0170; Claim 7 – paragraph 0011; Claim 8 – paragraph 0011; Claim 9 – Figure 3 and paragraphs 0092 and 0104-0113; Claim 10 – paragraph 0011; Claim 11 – paragraph 0033; Claim 12 – paragraphs 0011 and 0096; Claim 13 – Figure 3; and Claim 14 – Figure 3 and paragraphs 0092 and 0104-0113. The most pertinent passages from the Sakuramoto et al. published application cited by the Examiner appear to be paragraphs 0011 and 0104-0113.

More specifically, with respect to independent apparatus Claim 1, the Examiner contends that the Sakuramoto et al. published application discloses a content recording apparatus having a designator for designating in the order from a reference data file a plurality of data files, and he cites paragraph 0011 of the Sakuramoto et al. patent application for disclosing this; a data writer for writing content data into the data file designated by the designator, which the Examiner contends is disclosed in the Sakuramoto et al. published application at paragraph 0011; and an information writer for writing into a non-volatile storing area file information that identifies the data file designated by the designator at each time that a designation of the designator is updated, wherein the reference data file is a data

file specified by the latest file information stored in the non-volatile storing area, and the Examiner cites paragraph 0011 of the Sakuramoto et al. patent application for disclosing this feature.

With respect to dependent Claim 2, the Examiner contends that the Sakuramoto et al. published application discloses a marker writer for writing a marker into a non-volatile storing area at a time of ending a writing operation by the data writer, and refers to paragraph 0011 of the Sakuramoto et al. patent application for disclosing this feature; a determiner for determining whether or not a marker exists in the non-volatile storing area before starting the writing operation by the data writer, and refers to paragraph 0011 of the Sakuramoto et al. patent application for disclosing this feature; a detector for detecting a data discontinued point from the reference data file when a determination result of the determiner is negative, and refers to paragraph 0011 of the Sakuramoto et al. patent application for disclosing this feature; and a determiner for determining a writing starting location on the reference data file based on the data discontinued point detected by the detector, and refers to paragraph 0011 of the Sakuramoto et al. published application for disclosing this feature.

With respect to dependent Claim 3, the Examiner contends that the disclosure of a content data that includes moving image data having a plurality of frames of an image, and index data that manages each of a plurality of frames, where each of a plurality of data files includes a moving image file that stores moving image data, and an index file that stores index data, is found in the Sakuramoto et al. published application at paragraphs 0104-0113.

With respect to dependent Claim 4, the Examiner contends that the recitation in Claim 4 of the index data including time information indicating a time at which each of a plurality of frames of an image has been obtained, and a detector that detects a data discontinued point based on the time information is disclosed in the Sakuramoto et al. patent application at paragraph 0092.

With respect to dependent Claim 5, the Examiner contends that the recitation in Claim 5 of the plurality of frames of an image as including a first encoded image to which an intra-encoding is applied, and a second encoded image to which an inter-encoding is applied, and a determiner that determines as a writing starting location a location that precedes the data

discontinued point and in which a first encoded image exists, is disclosed in the Sakuramoto et al. patent application at paragraph 0011 and paragraph 0096.

With respect to dependent Claim 6, the Examiner contends that the recitation of a buffer for temporarily holding content data prior to the writing operation by the data writer, and the recitation of the determiner determining a writing starting location taking into consideration a capacity of the buffer, is disclosed in the Sakuramoto et al. published application at paragraph 0170.

With respect to dependent Claim 7, the Examiner contends that the Sakuramoto et al. published application discloses the recitation in Claim 7 of the plurality of data files having the same capacity to each other, and kindly refers to Figure 3 of the Sakuramoto et al. published application for disclosing this feature.

The Examiner rejects independent method Claim 8 for the same reasons submitted with respect to independent apparatus Claim 1.

With respect to dependent Claim 9, the Examiner contends that the recitation in Claim 9 of a recorder for recording into a recording medium content data formed of a plurality of partial content is disclosed in the Sakuramoto et al. published application in Figure 3; a creator for creating index data including location information indicating a location of each of a plurality of partial contents, and time information indicating a time at which each of the plurality of partial contents has been obtained, is disclosed in paragraph 0092 and paragraphs 0104-0113 of the Sakuramoto et al. published application; a detector for detecting a temporal discontinuing point of the index data based on time information before a recording operation by the recorder is started is disclosed in paragraphs 0092 and 0104-0113 of the Sakuramoto et al. published application; and a first determiner for determining a location of the starting recording content data based on the temporal discontinuing point detected by the detector is disclosed in the Sakuramoto et al. published application at paragraphs 0104-0113.

Dependent Claim 10 has been rejected on the same basis and for the same reasons submitted with respect to Claim 2.

With respect to dependent Claim 11, the Examiner contends that the Sakuramoto et al. published application discloses an information writer for writing into a non-volatile storing area location information indicating an ending location of a recording operation, and refers to paragraph 0033 of the Sakuramoto et al. published application for disclosing this feature; and a second determiner for determining a location for starting the recording content data based on the location information written in the non-volatile storing area when the determination result of the determiner is affirmative, and refers to paragraph 0033 of the Sakuramoto et al. published application for disclosing this feature.

Dependent Claim 12 has been rejected on the same basis and for the same reasons submitted with respect to Claim 5.

With respect to dependent Claim 13, the Examiner contends that the recitation in Claim 13 of a plurality of data files being formed in the recording medium, and a recorder sequentially recording the content data into the plurality of data files, is disclosed in Figure 3 of the Sakuramoto et al. published application.

With respect to dependent Claim 14, this claim has been rejected on the same basis and for the same reasons submitted with respect to Claim 9.

The Sakuramoto et al. patent application has been carefully considered, and Applicant respectfully submits that it does not teach or suggest the content recording apparatus and the content recording method set forth in Claims 1-14 as originally filed, and new Claims 15 and 16 submitted herewith for the Examiner's kind consideration.

The Sakuramoto et al. patent application discloses a recording/reproducing apparatus that memorizes identification information so that the recording/reproducing apparatus can start where it left off if there is a loss of power or the power supply is turned off. This identification information includes not only information relating to the identification of the disk, title number, chapter number and set-up information selected by the user, but also video reproducing position information indicative of the physical position on the disk that indicates the position where recording or reproducing has last occurred prior to a loss of power. The Sakuramoto et al. patent application states, in Paragraph 0101, that the video reproducing

position, and other information, are preserved when the power supply is abruptly broken down or is cut off under a bad condition of the electric power supply source of the apparatus.

This information is stored in the last memory 9, which is described in the Sakuramoto et al. patent application as being an EEPROM or other non-volatile memory.

Now, referring to Figure 2 and Paragraphs 0104-0126 of the Sakuramoto et al. patent application, there it is shown and described what is stored in the last memory 9 (i.e., the non-volatile memory). Some of the information which is stored in last memory 9 includes the title number (Paragraph 0111), the kind of medium (Paragraph 0105), and set-up information selected by the user (Paragraphs 0114-0126). But more importantly, as stated in Paragraph 0113, the "reproduction interruption position" is stored in addresses 00B-00E. The reproduction interruption position is defined in the Sakuramoto et al. patent application, at Paragraph 0113, as being "the position just before when the power supply is abruptly interrupted or cut off (i.e., the video reproducing position), or the position of the last portion (the LAST position) of interrupting the reproduction designated by the user (for example, it can be indicated by time, including hour, minute and second or the address on the disk)."

In summary, the Sakuramoto et al. patent application discloses a method and structure that address the problem in a recording or reproducing apparatus of restarting the reproducing or recording approximately where such recording or reproducing was left off prior to a power failure. However, Applicant wishes to point out to the Examiner that the method and apparatus disclosed in the Sakuramoto et al. patent application solve this problem in a different way and with different structure than the structure and method defined by Claims 1-14 of the subject application.

More specifically, in the Sakuramoto et al. recording/reproducing apparatus, a timer 4 functions as an interruption instructing means for giving an interruption instruction to the controller portion 6 "at a random or arbitrary time period, such as every 1 min., for example here. This timer 4 may be constructed with an oscillator and a counter for counting a pulsed signal generated and outputted from the above oscillator at a constant time." (Please see Paragraph 0092 of the Sakuramoto et al. patent application.) Furthermore, as stated at Paragraph 0094 of the Sakuramoto et al. patent application, "the controller portion 6 samples

and/or extracts a physical position (i.e. video reproducing position) on the disk with respect to the display which is actually displayed under the control of the decoder portion 8, at the periodical interruption instruction timing of the timer 4 (every 1 min., for an example). And, the extracted information indicative of the video reproducing position is so controlled as to be stored into the last memory 9 corresponding to the information stored in the above work memory 3. Moreover, when an power switch is turned OFF, the controller portion 6 controls so that the information (i.e., LAST position information) indicative of the position of a Last portion on recording/reproducing area at which is lastly recorded/reproduced as far as the electric power is supplied thereto, is read out from the work memory 3 to be stored into the last memory 9 corresponding to other information.”

Thus, the Sakuramoto et al. recording/reproducing apparatus samples the position of the disk periodically (i.e., every one minute, for example) to determine the last known video reproducing position on the disk. This is not the same procedure as set forth in Claims 1-14 of the pending application.

The content recording apparatus and content recording method defined by Claims 1-14 write into a non-volatile storing area file information that identifies the data file at each time that a designation of the designator is updated such that the reference data file is the data file specified by the latest file information stored in the non-volatile storing area. Thus, when there is a power failure, or when the user switches from a normal recording operation to a reproduction operation, or the apparatus switches to a temporary recording (“live reproduction”) operation or in a file stretching situation or a designated-portion reproducing mode, the last recording (or reproducing) suspended location or time is detected and updated, and stored in the non-volatile memory. In other words, Applicant’s invention does not periodically sample the position on the disk at a periodic interval, as taught in the Sakuramoto et al. patent application. Thus, with the Sakuramoto et al apparatus, depending on what the timer 4 sets the interruption sampling timing to be, the last location on the disk prior to the power failure may be incorrect by as much as the full sampling time set by the timer 4. Accordingly, Applicant’s claimed content recording apparatus and method are respectfully urged to be more accurate for determining the last known position or time for recording or

reproducing data than the apparatus and method disclosed in the Sakuramoto et al. published application.

Accordingly, it is respectfully urged that Claims 1-14, in their present form, patentably distinguish over the Sakuramoto et al. published application and are allowable.

New Claims 15 and 16 are submitted herewith for the Examiner's kind consideration. Claims 15 and 16 are very similar to the claims in the corresponding basic Japanese application which have been allowed therein.

More specifically, new independent Claim 15 defines Applicant's content recording apparatus as including a recorder which cyclically records content data being encoded on a recording medium, and a producer which in parallel with a recording of the content data by the recorder cyclically produces on the recording medium index data having information for referring the content data and time information.

The content recording apparatus of new Claim 15 also includes a recording state information holder which holds state information that represents two states of a recording state and a record suspended state. New Claim 15 recites that when the recording of the content data is started in response to a record starting instruction, the recording state is established, and when the recording of the content data is suspended in response to a record suspending instruction, the record suspended state is established.

New Claim 15 also calls for a writing location memory which stores a writing location at a time that the recording is suspended by the record suspending instruction. The content recording apparatus of new Claim 15 also includes a detector which detects a temporal discontinued point by scanning the index data if the state information is the recording state after the power is turned on.

New Claim 15 also defines the content recording apparatus as including a first setter which sets a first record starting location at a location corresponding to the temporal discontinued point on the basis of index data of the temporal discontinued point if the temporal discontinued point is detected by the detector, and a first record starter which starts the recording of the content from the first record starting location.

The content recording apparatus defined by new Claim 15 also includes a second setter which sets a second record starting location at a location corresponding to the writing location if the state information is the recording state after the power is turned on, and a second record starter which starts the recording of the content from the second record starting location in response to the record starting instruction.

New Claim 16 depends from new Claim 15, and more specifically defines Applicant's content recording apparatus. More specifically, in new Claim 16, the content data is defined as including at least an intra-encoded image obtained through an intra-encoding, and the first setter is defined as setting a location of the intra-encoded image included in an image group in which the temporal discontinued point is belonging as the first record starting location if an image corresponding to the temporal discontinued point is not the intra-encoded image.

As stated previously, the Sakuramoto et al. recording/reproducing apparatus samples the position of the disc periodically to determine the last known video reproducing position on the disc. This is not the same procedure, nor does it include the same structure, as set forth in new Claims 15 and 16 submitted herewith for the Examiner's consideration. It is believed that there is no disclosure in the Sakuramoto et al. published application of a recording state information holder which holds state information that represents two states (a recording state and a record suspended state), and when the recording of the content data is started in response to a record starting instruction, the recording state is established, and when the recording of the content data is suspended in response to a record suspending instruction, the record suspended state is established, as defined by new Claim 15. Furthermore, it is believed that the Sakuramoto et al. published application does not disclose a detector which detects a temporal discontinued point by scanning the index data which is cyclically produced on the recording medium in parallel with a recording of the content data if the state information is the recording state after power is turned on, nor is it believed that the Sakuramoto et al. patent application discloses either a first setter which sets a first record starting location at a location corresponding to the temporal discontinued point on the basis of the index data of the temporal discontinued point if the temporal discontinued point is detected by the detector, or a second setter which sets a second record starting location at a

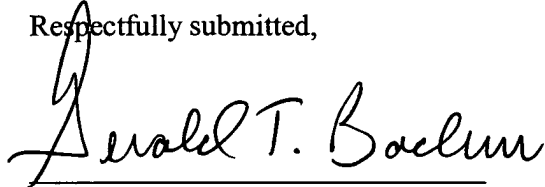
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Page 15

location corresponding to the writing location if the state information is the recording state after the power is turned on.

Accordingly, it is respectfully urged that new independent Claim 15, and new Claim 16 which depends from Claim 15, patentably distinguish over the Sakuramoto et al. published application and are allowable.

In view of the foregoing remarks, entry of new Claims 15 and 16 and favorable consideration of these claims, favorable reconsideration of Claims 1-14 in their original form and allowance of the application with Claims 1-16 are respectfully solicited.

Respectfully submitted,

A handwritten signature in cursive script, reading "Gerald T. Bodner", written over a horizontal line.

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